

L3 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:427634 HCAPLUS
 DOCUMENT NUMBER: 140:424120
 ENTRY DATE: Entered STN: 27 May 2004
 TITLE: Polyisobutenyl ethers and thioethers
 INVENTOR(S): Lange, Arno; Mach, Helmut; Rath, Hans Peter;
 Mijolovic, Dario
 PATENT ASSIGNEE(S): BASF Ag, Germany
 SOURCE: Eur. Pat. Appl., 9 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 INT. PATENT CLASSIF.:
 MAIN: C08F008-00
 SECONDARY: C08G081-02
 CLASSIFICATION: 35-8 (Chemistry of Synthetic High Polymers)
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1422246	A2	20040526	EP 2003-26650	20031119
EP 1422246	A3	20041013		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10254924	A1	20040603	DE 2002-10254924	20021125
US 2004102653	A1	20040527	US 2003-698457	20031103 <--
PRIORITY APPLN. INFO.:			DE 2002-10254924	A 20021125

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1422246	ICM	C08F008-00
	ICS	C08G081-02
EP 1422246	ECLA	C08F008/00+10/10
DE 10254924	ECLA	C08F008/00+10/10
US 2004102653	ECLA	C08F008/00+10/10

<--

ABSTRACT:

Polyisobutenyl ethers and thioethers are manufactured by reacting terminal epoxy-group-containing polyisobutenes with themselves, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators under irradiation and are useful for curable compns. Thus, heating 30 g of the epoxidized polyisobutylene having mol. weight 1,000 in 150 mL of MeOH in the presence of 1 mL of boron trifluoride etherate for 3 h at 50° gives 36.7 g of an oil containing 70% of methoxyhydroxypolyisobutene.

SUPPL. TERM: polyisobutenyl ether thioether manuf; reaction epoxy group contg polyisobutene epoxide alc thiol; Lewis acid cationic photoinitiator; epoxidized polyisobutylene methanol boron trifluoride etherate

INDEX TERM:

Halides
 ROLE: CAT (Catalyst use); USES (Uses)
 (B and other, Lewis acids; polyisobutenyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Sulfonium compounds
ROLE: CAT (Catalyst use); USES (Uses)
(cationic photoinitiators; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Rare earth compounds
ROLE: CAT (Catalyst use); USES (Uses)
(halides and sulfonates, Lewis acids; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Onium compounds
ROLE: CAT (Catalyst use); USES (Uses)
(iodonium, cationic photoinitiators; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Ring opening
(photochem.; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene, useful for curable compns.)

INDEX TERM: Lewis acids
ROLE: CAT (Catalyst use); USES (Uses)
(polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Alcohols, reactions
ROLE: RCT (Reactant); RACT (Reactant or reagent)
Thiols (polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Epoxides
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Thiols (organic), reactions
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Crosslinking
Ring opening catalysts
(polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobut ene, useful for curable compns.)

INDEX TERM: Ethers, preparation
Thioethers
ROLE: IMF (Industrial manufacture); PREP (Preparation)

(polyisobutyl; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: Sulfonic acids, uses

ROLE: CAT (Catalyst use); USES (Uses)

(salts, B and other, Lewis acids; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: 7429-90-5D, Aluminum, halides and sulfonates

7439-89-6D, Iron, halides and sulfonates

7440-31-5D, Tin, halides and sulfonates

7440-32-6D, Titanium, halides and sulfonates

7440-36-0D, Antimony, halides and sulfonates

7440-42-8D, Boron, halides and sulfonates

7440-55-3D, Gallium, halides and sulfonates

7440-62-2D, Vanadium, halides and sulfonates

7446-70-0, Aluminumtrichloride, uses

7550-45-0, Titanium tetrachloride, uses

7637-07-2, Borontrifluoride, uses 7705-08-0

, Iron trichloride, uses 10294-34-5,

Borontrichloride

ROLE: CAT (Catalyst use); USES (Uses)

(Lewis acids; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: 109-63-7, Borontrifluoride etherate

ROLE: CAT (Catalyst use); USES (Uses)

(polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

INDEX TERM: 67-56-1DP, Methanol, reaction products with

epoxidized Polyisobutylene 9003-27-4DP,

Polyisobutylene, epoxidized, reaction products with MeOH

ROLE: IMF (Industrial manufacture); PREP (Preparation)

(polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

IT 7429-90-5D, Aluminum, halides and sulfonates 7439-89-6D,

Iron, halides and sulfonates 7440-31-5D, Tin, halides and

sulfonates 7440-32-6D, Titanium, halides and sulfonates

7440-36-0D, Antimony, halides and sulfonates 7440-42-8D,

Boron, halides and sulfonates 7440-55-3D, Gallium, halides and

sulfonates 7440-62-2D, Vanadium, halides and sulfonates

7446-70-0, Aluminumtrichloride, uses 7550-45-0, Titanium

tetrachloride, uses 7637-07-2, Borontrifluoride, uses

7705-08-0, Iron trichloride, uses 10294-34-5,

Borontrichloride

RL: CAT (Catalyst use); USES (Uses)

(Lewis acids; polyisobut enyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators)

RN 7429-90-5 HCAPLUS
CN Aluminum (8CI, 9CI) (CA INDEX NAME)

Al

RN 7439-89-6 HCAPLUS
CN Iron (7CI, 8CI, 9CI) (CA INDEX NAME)

Fe

RN 7440-31-5 HCAPLUS
CN Tin (8CI, 9CI) (CA INDEX NAME)

Sn

RN 7440-32-6 HCAPLUS
CN Titanium (8CI, 9CI) (CA INDEX NAME)

Ti

RN 7440-36-0 HCAPLUS
CN Antimony (8CI, 9CI) (CA INDEX NAME)

Sb

RN 7440-42-8 HCAPLUS
CN Boron (8CI, 9CI) (CA INDEX NAME)

B

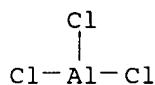
RN 7440-55-3 HCAPLUS
CN Gallium (8CI, 9CI) (CA INDEX NAME)

Ga

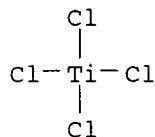
RN 7440-62-2 HCAPLUS
CN Vanadium (8CI, 9CI) (CA INDEX NAME)

V

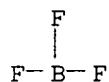
RN 7446-70-0 HCAPLUS
CN Aluminum chloride (AlCl₃) (9CI) (CA INDEX NAME)



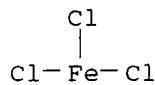
RN 7550-45-0 HCAPLUS
 CN Titanium chloride (TiCl₄) (T-4)- (9CI) (CA INDEX NAME)



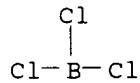
RN 7637-07-2 HCAPLUS
 CN Borane, trifluoro- (9CI) (CA INDEX NAME)



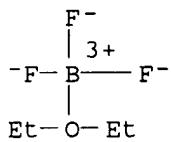
RN 7705-08-0 HCAPLUS
 CN Iron chloride (FeCl₃) (8CI, 9CI) (CA INDEX NAME)



RN 10294-34-5 HCAPLUS
 CN Borane, trichloro- (9CI) (CA INDEX NAME)



IT 109-63-7, Borontrifluoride etherate
 RL: CAT (Catalyst use); USES (Uses)
 (polyisobutylene ether and thioether manufactured by reacting terminal
 epoxy-group-containing polyisobutene with itself, other epoxides and/or
 alcs. or thiols in the presence of Lewis acids or/and cationic
 photoinitiators)
 RN 109-63-7 HCAPLUS
 CN Boron, trifluoro[1,1'-oxybis[ethane]]-, (T-4)- (9CI) (CA INDEX NAME)



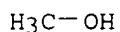
IT 67-56-1DP, Methanol, reaction products with epoxidized Polyisobutylene 9003-27-4DP, Polyisobutylene, epoxidized, reaction products with MeOH

RL: IMF (Industrial manufacture); PREP (Preparation)

(polyisobuteneyl ether and thioether manufactured by reacting terminal epoxy-group-containing polyisobutene with itself, other epoxides and/or alcs. or thiols in the presence of Lewis acids or/and cationic photoinitiators).

RN 67-56-1 HCAPLUS

CN Methanol (8CI, 9CI) (CA INDEX NAME)



RN 9003-27-4 HCAPLUS

CN 1-Propene, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-11-7

CMF C4 H8

